







SME finance and growth: evidence from RBL Bank

Case Study 2017



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This study is the result of a partnership between CDC Group Plc, the International Finance Corporation (IFC), and RBL Bank as a contribution to Let's Work, a global partnership that unites organisations to provide effective solutions to tackle the global jobs crisis. The team would like to thank several individuals who have contributed to this report. Our gratitude goes to the RBL team: Rajiv Janjanam, Nishant Shah, Anshul Swami and Faiyaz Naikwadi. Without their efforts – their provision of data, time, and information, their follow-ups, coordination and multiple reviews – this study would not have been possible. The team is also grateful to the SME clients of the bank who took the time to share their stories.

The Joint CDC-IFC team who managed the study comprised Mahima Khanna (IFC) and Alice Kehoe (CDC) with the support of Alex MacGillivray (CDC) and Kate Griffith (CDC).

The authors would like to acknowledge Ilaria Benucci (CDC) and Anup Kumar Agarwal (IFC) for facilitating coordination with RBL Bank management and for reviewing the study. The authors also benefited from the data collection exercise conducted by consulting firm Market Xcel. In particular, the contributions of Paroo Tikoo and Ashwani Arora are valuable to the success of this study. The authors are also grateful for the guidance, insights, support, and feedback of Gaurav Malhotra (CDC), Maria Largey (CDC), and Srini Nagarajan (CDC), Dan Goldblum (IFC) and Nilesh Shrivastava (IFC) and Alvaro Gonzalez (World Bank).

The publication of this report has been made possible through financial and in-kind contributions to the Let's Work Partnership Program from the CDC Group and the Jobs Umbrella Trust Fund, and in-kind contributions from the IFC. The Jobs Umbrella Trust Fund is supported by the Department for International Development/UK AID, and the Governments of Norway, Germany, Austria, the Austrian Development Agency, and the Swedish International Development Cooperation Agency.

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Foreword



India has experienced strong economic growth in the past decade, and more growth is still to come: the IMF estimates that India will be one of the fastest growing economies in 2017.

But with this growth are some challenges; namely, increasing inclusion and equality across the population. This is not just a social issue, but one that businesses can address by designing products for those that are excluded. At HDFC, we see huge potential in the underserved segment, and so have focused on affordable housing, for instance through our subsidiary GRUH Finance, which has supported hundreds of thousands of customers.

RBL Bank has helped address the inclusive growth agenda, as almost a third of RBL Bank's advances categorise as priority sector lending. This includes financing agricultureallied activities, small scale industries and businesses, micro credit, education and housing loans. In addition, it has a strong focus on SMEs, launching its small business products in 2012.

Keki Mistry

Vice-Chairman and CEO of Housing Development Finance Corporation

There is significant evidence on SME demand for finance. For instance, 15% of SMEs in India consider access to finance as a major constraint to growth, and the World Bank estimates that the credit gap for MSMEs in India amounts to \$230bn. There is also macro evidence that these small, high growth businesses are large contributors to job creation. So it follows that many financial institutions are directing significant efforts to address SME demand, often with the active encouragement of development finance institutions and policy-makers.

Yet there is less evidence tracking how – or whether – SMEs grow after receiving a loan, and this is particularly the case in India and other emerging markets. This study is important as it adds to the evidence base, finding that on average, an estimated 10-15 jobs are created per year per \$1m USD in SME financing. And overall, the SMEs improved their financial results following the loan from RBL Bank and invested in assets. While more work needs to be done to see whether the results are typical across all SMEs, the evidence confirms that providing SME finance should be an important item on the development agenda.

1. Executive summary

600 million jobs need to be created globally by 2030 to maintain the current employment rate along with expected population growth.1 Furthermore, most of these jobs should come from South Asia and sub-Saharan Africa, where most unemployed people live. This job creation goal is particularly relevant for India, the second most populous country in the world with 1.34 billion people. Also, it is believed that micro, small and medium enterprises (MSMEs) represent a significant part of the world economy, and are one of the strongest drivers of economic development, innovation and employment. These MSMEs are expected to play a critical role in meeting this job creation challenge. However, in today's world, most MSMEs are credit constrained. A recent International Finance Corporation (IFC) study concludes that in South Asia, over 80 per cent of MSMEs do not receive the amount of credit they desire. The credit gap for MSMEs in India is US\$230 billion.2

IFC, a member of the World Bank Group, and CDC Group Plc ('CDC'), aim to help people escape poverty and boost shared prosperity by promoting private sector-led growth. To contribute to their agenda, they provide both investment and advisory services to financial institutions like RBL Bank Ltd (RBL). The goals of these services are to expand access to finance for local small and medium enterprises (SMEs), support the growth of their businesses, create new jobs and consequently stimulate the country's economic growth.

RBL is a mid-sized scheduled commercial bank established in India in 1943. Being one of the oldest private sector banks in the country it services around 3.6m customers. RBL is listed on India's National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). It offers a comprehensive range of banking products and services, with a special focus on priority sector lending (PSL) that includes supporting underserved or unbanked customers. RBL's investment in the PSL sector as of 31 March 2017 was 9,345.6 crores3 (US\$1,392.8 million) or approximately 31.7 per cent of total advances. From December 2013 to December 2016, the bank's SME portfolio has grown from US\$301 million to US\$841 million.

IFC's relationship with RBL began with an equity investment in 2013 for a 4.51 per cent stake. In 2014, IFC made an additional investment of US\$2.8 million to maintain its equity stake, and also extended a global trade finance programme line to RBL to help the bank provide short-term working capital to SMEs. In October 2017, IFC did a partial exit and the current stake is 2.16 per cent. CDC first made an equity investment of US\$28 million in RBL in March 2014 and followed with a pre-initial public offering (IPO) investment of US\$7 million in October 2015. CDC subsequently provided tier 2 debt capital of about US\$50 million, and also participated in the recent preferential placement to the extent of US\$100 million to take CDC's shareholding to 6.9 per cent. Both CDC Group and IFC's Advisory team have assisted RBL in financial literacy programmes.

Financial institutions globally are directing significant efforts towards SME finance, often with the active encouragement of development finance institutions and policy-makers. Yet there is currently little robust evidence on the impacts of loans on the performance of end clients, particularly in India and other emerging markets. Therefore, the primary objective of this study is to assess performance at SMEs after receiving a loan from RBL over 2012–15, in particular, whether they experienced changes in employment or in financial performance.

The baseline for this study was collected by the authors in June 2016 and the end-line was collected in April 2017 with the help of an external consultancy, Market Xcel. The primary data collected comprised of business and employment data from over 100 randomly selected SMEs. Performance was measured at the time of the loan and two years later, to understand whether there had been any changes resulting from the loan. Overall, the study triangulates data from secondary sources along with primary data from the management information system, loan file reviews, field interviews with RBL's employees, and SME loan recipients; it uses simple statistical techniques, including regression analysis. The withdrawal of legal tender status for Indian rupees (INR) 500 and 1,000 denominations of bank notes issued by the Reserve Bank of India (RBI) occurred during the study period, and should be kept in mind when interpreting the results; however, the SMEs that recalled experiencing effects from the withdrawal reported that they were short-lived.

Summary of selected results

Table 1 summarises growth rates for 113 SMEs since taking a loan from RBL. Overall, our study finds that SME lending has led to some great successes. While overall growth among SME borrowers has been mixed, and not statistically different from non-borrowers in many cases, we found that selected SMEs have dramatically increased their employment, revenue, and labour productivity. For instance, the findings suggest that SMEs may need to reach a minimal scale before they become fastgrowing gazelles. Given the small sample, these findings should be taken with caution. However, they open up important questions on the opportunity of improved targeting and more research.

Business Performance

 Most clients in the sample increased their incomes and sales in the two years following the loan, growing income by 10 per cent compound annual growth rates (CAGR) and sales by 9 per cent CAGR on average.

- Assets grew by 7% since the loan, showing that SMEs have had the ability to invest in their businesses after covering costs.
- Productivity also increased, with sales per worker growing at an annualised rate of 6 per cent since the loan.

Impact of SME growth on local employment

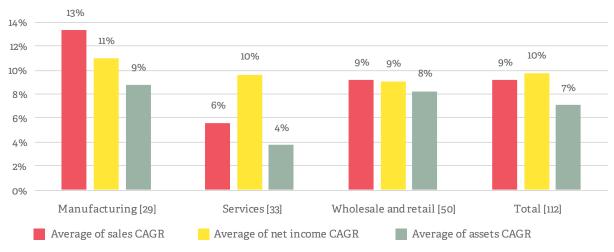
- Given the short time period, most borrowers were able to grow their businesses through better productivity without having to hire more staff. Indeed, productivity gains coupled with use of the loans for investment purposes led to more modest job creation rates after the loan.
- Nevertheless, the SMEs, which employed 1,102 people at the time of loan approval, still exhibited an annualised employment growth rate of 6 per cent post loan.
- A smaller group of fast-growth businesses

 known as 'gazelles' in economic
 literature created almost all of the jobs.
 Gazelles made up 27% of the sample.

Table 1: Growth rates for 113 SMEs following an RBL loan

Impact ⁴	Average annual growth rate since loan (CAGR)	Proportion of businesses that grew
Sales	9%	85%
Income	10%	80%
Assets	7%	81%
Employment	6%	27%
Female employment	4%	10%

Figure 1: Annualised business performance since the loan, by sector



- 24 per cent of the new jobs were for women. Only four in ten SMEs employed any women, but clients with women involved in ownership or day-to-day management were more likely to employ women.
- On average, US\$1 million in financing for SMEs from RBL can be estimated to create 10–15 direct jobs per year at the SME.
- Extrapolating this to RBL's overall SME portfolio since 2013, SME beneficiaries of RBL created 5,600-7,200 jobs. This does not include indirect employment in the SMEs' supply chains and resulting from local spending of wages.

Customer profile and perspectives

 79 per cent of the clients reported that the loan had made a difference to their business performance (consistent with the proportion that had grown sales, income and assets).

- 55 per cent were first-time borrowers of formal finance at the time they took the loan. For first time borrowers, 67 per cent cited personal finances as their main source of financing before the loan, 63 per cent had used loans from family and friends, and 56 per cent had used moneylenders. Over half of first-time borrowers reported that access to finance had been an obstacle.
- 35 per cent of clients intend to apply for a further loan within the next two years, for around INR 6.1 million (or US\$98,000) on average, which is over double the current average loan size. The most important factor in deciding to take the loan would be the interest rate, followed by the loan amount available.
- 14 per cent of the MSMEs had female ownership, in line with national averages;
 22 per cent of the SMEs had women involved in the day-to-day management of the business.

2. Introduction

2.1 Introduction to RBL

RBL started its journey in 1943 in Kolhapur, Maharashtra in India as the Ratnakar Bank Ltd. It was started by like-minded entrepreneurs and lawyers to provide funding to local businesses. Until FY 2009/10 the bank's reach was limited largely to Maharashtra, Karnataka, Gujarat and Goa. In FY 2009/10, Vishwavir Ahuja was appointed as MD and CEO of the bank. He brought together a team of banking professionals and overhauled operations, brand image, technology infrastructure and work culture. In FY 2014/15 the bank rebranded itself as 'RBL Bank Ltd.' Between FY 2009/10 and FY 2016/17, net deposits, net advances, net profit and net assets have all grown at CAGR in the region of 50 per cent (see Table 2).

The number of branches and ATMs has also grown from around 100 branches (across five states) in FY 2009/10 to 244 branches and 387 ATMs (across 19 Indian states and union territories) as at June 2017.

RBL is listed on India's National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). It offers a comprehensive range of banking products and services, with a special focus on PSL that includes supporting underserved or unbanked customers. RBL's investment in the PSL sector as of 31 March 2017 was 9,345.6 Crore (US\$1,392.8 million) or approximately 31.7 per cent of total advances.

RBL's strategy will be increasingly mapped to meet the needs of PSL segments. One of the key PSL lending strategies of the bank lies in funding MSME businesses through its Loan Against Property (LAP), Business instalment loans (BIL) and MSME loans. These loans are focused on small local businesses that are poised to achieve higher growth but are operating in a cash-strapped environment.

2.2 RBL and its relationship with CDC and IFC

Investment

In April 2013, IFC supported RBL through an equity investment of \$22 million for a 4.5 per cent stake. In 2014, it made an additional investment of US\$2.8 million to maintain its equity stake, and also extended a global trade finance programme line to RBL to help the bank provide short-term working capital to SMEs. In October 2017, IFC did a partial exit and the current stake is 2.16 per cent.

CDC first made an equity investment of US\$28 million in RBL in March 2014 and followed this with a pre-IPO investment of US\$7 million in October 2015. With close to 5 per cent equity, this made CDC one of the largest investors in the bank. CDC then provided tier 2 debt capital to the sum of INR 330 crore (around US\$50 million) to RBL in September 2016; it also participated in the recent preferential placement to the extent of US\$100 million, taking CDC's shareholding to 6.9 per cent.

Table 2: RBL Bank net deposits	advances	profit and	accete in E	V 2000/10 2	nd EV 2016/17
Table 2. KDL Dalik fiel deposits	, auvances,	prom and	assets III r	1 2009/10 a	10 F 1 2016/1/

	INR Crore		US\$ million⁵		CAGR (local)
	FY 2009-10	FY 2016-17	FY 2009-10	FY 2016-17	
Deposits	1,585	34,588	353	5,158	55.3%
Net advances	1,170	29,449	261	4,391	58.5%
Net profit	19	446	4	67	57.0%
Total assets	2,086	48,675	456	7,258	56.8%

Source: RBL Bank Annual Reports and author's calculations

Collaboration and Initiatives

IFC has provided advisory and investment assistance to RBL to improve its corporate governance standards, asset liability and risk management systems. CDC established an Environmental, Social and Governance Committee which has met regularly since its investment and helped shape and drive environmental and social performance and practice in the bank. In 2014 and 2015, IFC advisory services worked with RBL to create financial awareness among its end beneficiaries, particularly low-income households. IFC considers RBL a long-term strategic partner and has helped the bank to diversify its funding sources and prepare for its IPO in September 2016.

CDC has partnered with RBL to help improve financial literacy. In March 2015, CDC and RBL launched a new financial literacy programme that has been rolled out in Madhya Pradesh. Building on RBL's 'Saksham' programme, it aims to increase financial inclusion by improving the financial literacy of around 25,000 people and 300 villages in four districts of Madhya Pradesh. The programme, which was designed and implemented by Accion India, targets rural areas where levels of education are low and levels of financial exclusion are high. In-depth classroom-style training has been supplemented by a mass awareness campaign, specifically catering for people with low literacy levels.

For this study, CDC, IFC and RBL have collaborated to better understand SMEs in India. Specifically, the primary objective of this study is to assess performance at SMEs after receiving a loan from RBL over 2012–15, in particular, whether they experienced changes in employment or in financial performance.

Case Study #1. MSME loan to purchase raw materials



Type of Business	Manufacturers dentures and dental supplies
Time Owned	7 years
Loan Type	MSME
Loan Amount	2.5 lakhs (US\$4,000) unsecured
Year of Loan	2016
No. employees (of At time of loan Current	which female): 3 (0) 6 (0)

The borrower has run a business manufacturing dentures and dental supplies since 2009. At the beginning of 2016, she took out a 2.5 lakh loan to purchase additional raw materials, enabling her to fill more orders.

As a consequence, sales have gone up by an estimated 10–15 per cent. She has also achieved slightly better margins as she is able to buy the raw materials in bulk. To enable the increase in production, she has needed to increase employment from three to six, and now employs two technicians and four delivery boys. The borrower selected RBL because it provided a loan very quickly (within five days). She may look to expand further in a few years, but is happy with the size of the business for the time being.

3. Methodology⁶

3.1 Overview

The evaluation team conducted a baseline assessment in July 2016 to collect data at the time of the loan, and engaged market research agency Market Xcel in April 2017 to collect end-line data two years following the loan, obtaining firm-level information on financial inclusion, jobs supported and financial performance. A two-year period was selected to allow business growth and employment effects from the loan to materialise, while limiting external factors that could impact growth over the longer term.

For the baseline assessment, a sample of 200 active clients that received a loan of INR 500,000 (US\$8,000) and above (and below INR 125 million or US\$2 million) during the FYs 2013/15 was randomly selected.8 During the baseline data collection, the team reviewed 183 SME client loan files to extract information such as number of employees and gender breakdown, woman ownership status, sales, assets, income, sector, firm age, use of financing, first-time borrower status and location, among other indicators. Also, the team conducted a qualitative analysis by visiting the premises of eight clients to discuss the evolution of their businesses and the impact of their loan from RBL (see Appendix 7.2). In addition, RBL's team provided complementary data from its MIS system.

The end-line questionnaire included the same data as the baseline, as well as questions on female management and employment, the impact of demonetisation, potential future financing needs, and customer feedback. The questionnaire was translated into Hindi, Tamil, Kannada and Telugu and disseminated across regional hubs by the agency, Market Xcel.

It then collected the end-line data using an electronic survey, and interviewed most candidates in person.

In total, 115 of the original 183 clients were interviewed: a coverage rate of 63 per cent. Forty-eight of the respondents did not wish to participate, seven were unavailable and 13 could not be reached. Once the dataset was finalised, outliers were removed using the interquartile range method, also known as the Tukey method.9 Since the dataset comprised multiple variables (age, collateral size, employment at loan origination, change in employment, sales and asset variables), removing outliers for each variable would have been extremely restrictive. Therefore, only SMEs that had outliers for at least three or more variables were removed, resulting in 113 observations for the growth analysis.

A basic linear ordinary least squared regression is used to assess the correlation between bank loan amount and job creation outcomes, controlling for a host of firm characteristics. We evaluate the impact of RBL's loans on job growth by estimating the following regression model using cross-sectional data:

To extrapolate the total job creation over two years since the SMEs received the loans, the multiplier from the sample is applied to the target SME portfolio of the bank by the year of origination. The multiplier indicates the average annual impact of the loans originated.

For example, total number of jobs added during 2014–2016 is calculated as follows: Jobs created due to loans originated in 2014 = US\$ loans in 2014 X annual multiplier X 2 (years); Jobs created due to loans originated in 2015 = US\$ loans in 2015 X annual multiplier X 1 (year).

Equation 1

$$\Delta Jobs_{(t+2-t)} = \alpha + \beta_i X_{i(t+2-t)} + e$$

Where:

Jobs is the dependent variable, which is measured as jobs added per year;

Xi are explanatory variables, which include RBL's loan at the origination as the main variable of interest and several control variables including macroeconomic variables;

 α is the fixed effect or constant;

e is the error term;

i is a marginal impact of an explanatory variable on the dependent variable of interest.

3.2 Sample characteristics (113 SMEs)

Table 3: Characteristics of 113 SMEs

Characteristic	Average	Median
Loan size (INR)	2,565,403	1,000,000
Loan size (USD)	46,203	16,569
Tenor	7	6
Interest rate (%)	19%	20%
Collateral coverage (%)	260%	201%
Proportion of companies taking		
Long-term loans (> 3 years)		80%
Medium-term loans (1-3 years)		20%

3.3 Caveats

The study is based on data collected from 113 SMEs; this represents 20 per cent of the population and is a large enough sample to minimise sample error. However, there are inherent caveats which must be kept in mind while interpreting the results. These include:

Selection bias

There were 183 respondents in the baseline assessment, 113 of which were able to participate in the end-line survey. Respondents that have not experienced growth or do not have a good relationship with RBL may not have wanted to participate, meaning the results could be positively skewed.

Recall

The accuracy of end-line survey data depends on the ability to recall historical data, which would have been especially difficult for the micro-enterprises that do not have formal records.

Measurement error

Given the nature of the survey, measurement error is a likely issue in the data. Data for the end-line survey is as recorded by the SMEs to the surveyors; however, there may have been sensitivity around some of the variables, particularly income. For example, as clients were reporting data to their lender, they might have inflated their performance or minimised underperformance to appear creditworthy for future lending.

The extrapolated number of jobs created is for the population of SMEs whose total loans originated between 2014-16 and range between US\$10,000 to US\$2 million. The extrapolated numbers presented here underestimate the impact of RBL's SME lending operations in some significant ways. Firstly, we only calculated the impact of loans originated in 2016 for one year in order to estimate impacts as of 2016 year-end, although our model predicts impacts over at least two years. Secondly, the extrapolation exercise only accounts for the direct impact on SMEs that received the loan. Economic theory highlights important mechanisms through which the initial direct impact ultimately creates an overall impact on the economy. Yet this study does not capture indirect effects on the economy due to second-order effects on the value chain (suppliers and distributors) of the client SMEs, or induced effects from increased private consumption of client-SME employee households.

Omitted variable bias

Changes in key variables may have been influenced by indicators not analysed in the study, such as macroeconomic conditions, age and management experience of business owners. The omission of these variables limits statistical inference, particularly for regressions that try to measure causal effects.

Attribution

It is difficult to isolate macroeconomic and business conditions in the country, and the total effects on key variables cannot be attributed solely to the loans obtained from RBL. In addition, other types of financing such as those from informal sources and other financial institutions (where applicable) could be driving the changes in variables as well. There is therefore no attempt to imply attribution to the bank or to CDC and IFC.

Generalisation and prediction

The results of this study are specific to the sample reviewed and can only be used to extrapolate to a population with similar characteristics. The multipliers should not be used to extrapolate for non-representative populations, or predict effects in the future.

Case Study #2. MSME loan to purchase raw materials



Type of Business	Pharmaceutical equipment manufacturer
Time Owned	17 years
Loan Type	MSME
Loan Amount	3.5 lakhs (US\$5,600) unsecured
Year of Loan	2016
No. employees (o) At time of loan Current	f which female): 2 or 3 (0) 12 (1)

At 1,500 square foot, this was five times bigger than her previous premises. To capitalise on the additional space, the first-time borrower needed a loan to purchase additional raw materials (e.g. steel sheets and pipes) from suppliers in Gujarat, Mumbai and Delhi.

Since her requirements were relatively small, RBL was able to approve a 3.5 lakh unsecured business instalment loan in early 2016, enabling her to ramp up production. This in turn created a need for more workers, with the borrower increasing her workforce from 2 or 3 employees to 12. She provides on-the-job training to build the necessary skill sets, rather than trying to source these.

Together, the new premises and loan have led to an estimated 60 per cent increase in sales over the past 6 months, with 40 per cent of products exported to countries such as Sudan and Ethiopia and the remainder sold in India. In addition to expanding production, RBL's loan has enabled the borrower to start building a credit history. She is hoping to open a masala business to diversify her income and may need additional loans to finance her plans.

4. Analysis: Evolution of SMEs after two years

4.1 Employment

Link between financing and direct jobs

Results of the cross-sectional ordinary least squared regression (presented in Appendix 7.1) suggest that an increase of US\$1 million in loans, holding other factors mentioned in the regression equation constant, is associated with an increase of 10–15 jobs per year (on average) over the study period.10 The regression takes into account that the effect on job creation depends on the sector, whether the firm took its first loan ever with RBL, the purpose of the loan, the age of the business, the age of the owner/s, the gender of the owner/s, and the initial size of the capital investment. This result is significant at the 90 per cent level, and is likely representative of the population, the sample covering 20 per cent of eligible population.11

These estimates of the multiplier are in line with other previous attempts at estimating a jobs multiplier through various methodologies. Khanna and Singh (forthcoming)¹² concluded that across developing economies, SMEs create 5.3 jobs per year with each million dollars in financing. Brown and Earle (2013)¹³ use data from the US Small Business Administration loan programme and estimate the creation of 5.4 jobs per million dollars in loan value.

To extrapolate this multiplier, IFC's loan size proxy has been used to determine which part of RBL's portfolio is likely to serve SMEs. IFC's loan size proxies estimates that loans between \$10,000 and \$2 million are likely to serve SMEs in emerging markets. From December 2013 to 2016, RBL increased its loans in this category from US\$301 million to US\$841 million, creating an estimated 5,600–7,200 jobs at the SMEs, and many more in the supply chain and in the spending of wages.

Average employment growth rates at the SMEs

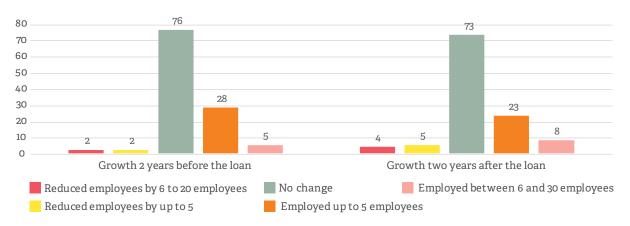
The SMEs employed a total of 1,218 staff two years after the loan, creating 116 jobs. While the 10–15 jobs per million in loans multiplier is in line with these aggregated results, what is striking is that most experienced no change in employment. Hence large job creators are pulling up averages, as shown in Figure 2. Most SMEs did not change their employment over five years: after loan approval, 27 per cent of the firms increased employment, 65 per cent stayed the same over the two years, and the remainder decreased headcount. Most of those reducing headcount cited market conditions as the main driver; "Due to low business there were layoffs...", "Work came down", and, "I had to reduce my workers due to market".

Therefore, while there is a significant relationship between SME financing and job creation, growth is only experienced by some high-performing SMEs. This is consistent with findings in SME research, which indicates that job growth is driven by a small group of strong performers, often referred to as 'gazelles'. 15

Table 4: Average employment growth rates at the SMEs

Indicator	Average CAGR since time of loan	Proportion of businesses that are growing	Sample size
Employment	6%	27%	113
Female Employment	4%	10%	110

Figure 2: Employment growth before and after loan



Average Employment Growth Rates by Industry

On average, employment growth rates were positive, but they have slowed compared with those of previous years, except in the case of wholesale and retail trade. All of the RBL SMEs are generally outperforming or in line with benchmarks (Table 5).

Wholesale & retail trade SMEs experienced a 6 per cent increase in employment on average, compared with 4 per cent growth rates before the loan. While all of the sectors exhibited positive growth rates following the loan, this is the only sector to increase the rate at which employment grew. There is a strong 'gazelle effect' present, as 15 per cent of SMEs created ten or more jobs, compared with 5 per cent of the overall portfolio. In fact, just 24 per cent of the businesses in the segment created jobs compared with 28 per cent for manufacturing and 31 per cent for services. Recent employment benchmarks for the wholesale and retail sectors are not readily available, but they seem to be at least in line with the World Bank Enterprise Surveys data in FYs 2010/13. These had an annualised rate of 5 per cent for SMEs in the sector. Most of the businesses were taking a loan for stock and working capital, and it may be that accessing a wider variety or cheaper stock enabled businesses to cater to demand more effectively and grow.

- Manufacturing benchmarks are smaller in comparison with the other sectors, with recent McKinsey analysis of India Labour Bureau statistics suggesting only a 0–1 per cent annual employment growth rate for the sector from 2013–15. The large variance in employment growth rates before and after the loan may be a reflection of the sector's cyclical and volatile growth more generally.
- Services value-add to GDP grew at rates of around 8–10 per cent from 2012–15 in India; higher than manufacturing or aggregated GDP growth during the same period, which could partially explain the high job creation rates for services SMEs in this sample. While job creation has slowed from 13 to 11 per cent for the RBL SMEs operating in services, this is still outperforming similar benchmarks (between 6–10 per cent).

Figure 3: Average employment growth rates by industry

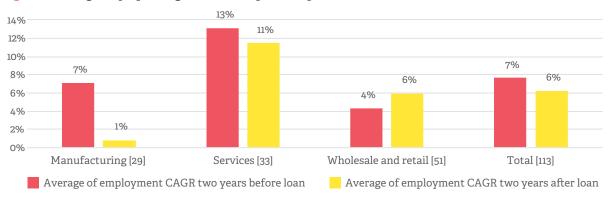


Table 5: Benchmark Growth Rates

Source	Year	Sample	Annual growth rate: all sectors	Annual growth rate: manufacturing	Annual growth rate: services	Annual growth rate: wholesale & retail
World Bank Enterprise Survey, India (SME)	2010 - 2013	6997	3.9%	3.2%	3.4%	4.9%
McKinsey Global Institute (All)	2013 - 2015	100,000 - 150,000 Household surveys	1.3%	0.0-1.0%	10% in trade & hotels; 2% restaurants*	10% in trade & hotels; 2% restaurants*
Sixth All India Economic Census (All)	2005 and 2013	58.5m enterprises of all sizes	4.1%	Not	available by se	ctor
Fourth All India	2012-13 (est.)	MSMEs	4.9%	Not	available by se	ctor
MSME Survey (MSME)	2001-06 (actual)	MSMEs	4.4%	3.7%	6.8%	6.8%**
Average			3.7%	2.5%	5.6%	5.6%

^{*} Most comparable sector for which data is available, ** Same as services as data does not cover wholesale and retail sector

Employment Growth by Firm Age and Size

Literature suggests that small and young firms create the most jobs. 16 Here, we find that young firms aged five years or less grew their workforce the most, at a rate of 12 per cent after the loan; however, the category has the highest degree of variation, suggesting higher volatility among youngest firms. When looking at firm size, very small and small firms tend to grow employment at a faster rate than their medium-sized counterparts, at rates of 6 and 8 per cent respectively, compared with 2 per cent growth. In addition, 21 per cent of the very small and 46 per cent of the small enterprises created jobs, compared with just 8 per cent of medium-sized businesses.

Female Employment

When outliers for female employment are removed,¹⁷ the total job creation decreases from 116 to 114 jobs. Of these, 24 per cent went to women, at an average annualised growth rate of 4 per cent, and so female employment is growing at a slower rate than total job

creation (6 per cent). This is largely driven by one company which hired ten women, removing this reduces this proportion from 24 to 16 per cent. It must be noted that 63 per cent of SMEs in this sample had zero female workers at the time of the loan, and this proportion did not change significantly following the loan. But this has to be viewed in the context of India where female labour force participation rates experienced a sharp decline from 37 per cent in 2005 to 27 per cent in 2012, and have remained at around 26-27 per cent since.18 Kapsos et al (2014) estimate that 42 per cent of the decline between 2010-14 is because of a lack of employment opportunities for women due to occupational segregation.19 Promisingly, 22 per cent of SMEs in the RBL sample had female management,20 and these businesses grew their female workforce by an annualised rate of 13 per cent, more than double the overall female job creation rate. However, 78 per cent of SMEs had all-male management, and on average, they reduced their female staff only two SMEs with all-male management created jobs for women.

Case Study #3. Loan Against Property (LAP) loan to increase stock of gold jewellery



Type of Business	Jewellery shop	
Time Owned	18 years	
Loan Type	LAP	
Loan Amount	1 crore (US\$160,000)	
Year of Loan	2013	
No. employees (of which female):		
At time of loan	10 (1)	
Current	10 (1)	

The borrower has owned a jewellery shop in Thane on the outskirts of Mumbai for 18 years. In 2013 he took out a one crore loan with RBL bank to increase his stock of gold jewellery, to attract more customers.

However, the market has since been difficult and business growth has stagnated – including the introduction of a 1 per cent excise duty on gold jewellery leading to jeweller strikes at the beginning of this year.

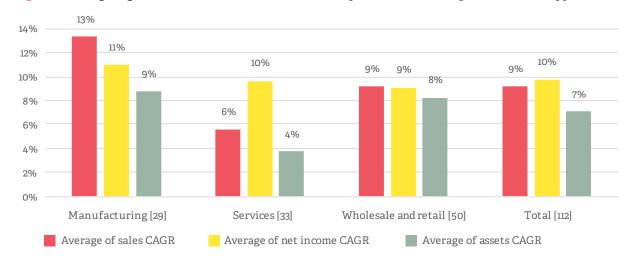
Given the difficult market, the borrower sees sustaining the business, including all ten employees, as a success. He doesn't have any expansion plans, but would consider another RBL loan if it reduced its interest rate. It is a very competitive environment, with lots of bankers approaching him to offer their financial products and services: the lower the interest rate, the more attractive the loan.

4.2 Business Performance²¹

Table 6: Summary of Business Performance

Indicator	Average CAGR since time of loan	Proportion of businesses that are growing	Sample size
Sales	9%	85%	113
Income	10%	80%	112
Assets	7%	81%	113

Figure 4: Average % growth in sales, net income and assets by sector (CAGR two years since loan approval)



Sales

On aggregate, sales grew at an annual rate of 9 per cent since the loan. By comparison, SMEs in India's most recent Enterprise Survey reported an average rate of 8 per cent from FYs 2010/13, and India's GDP grew by 7 per cent per year from 2013–17.22 The manufacturing SMEs led in sale growth, increasing at an average rate of 13 per cent since taking the loan. The manufacturing sector grew by 11 per cent in 2015 (most recent data), and had an annual average growth rate of 7 per cent from 2012–15; however, the growth rates in this sector are erratic. The services sector in India grew by 10 per cent in terms of GDP value-add in 2015,23 experiencing an annual average growth rate of 9 per cent between 2012–15. Although on a macro level the services segment has experienced higher rates of growth compared with GDP and manufacturing, in the survey only small businesses operating in services outperformed services GDP growth, and it was the worst performing sector for the rest of the businesses. Therefore, services have underperformed, but manufacturing, wholesale and retail, and the sample overall have grown in line with or outperformed the market.

The RBI's reporting on non-government non-financial private company data has slightly higher benchmarks, with a 10 per cent annual average growth rate in sales from 2014–16. It also reports by sector: 8 per cent for manufacturing, 15 per cent for trade, wholesale and retail, and 13 per cent for services (excluding trade, wholesale and retail). Using this benchmark, manufacturing SMEs in the survey outperformed the private limited businesses on sales, but the other sectors lag behind the overall and sector averages.

Income

The average net income growth rate is 10 per cent across the SMEs, with medium-sized enterprises tending to outperform the other-sized enterprises at a rate of 11 per cent. While sales growth was between 6 and 14 per cent depending on the sector, there was less variation in income growth: again, manufacturing leads (11 per cent), followed by services (10 per cent) and wholesale and retail (9 per cent).

The RBI sample experienced a 15 per cent average growth in profit before tax from 2014 to 2016 across all industries. By sector this was 16 per cent for both manufacturing and services, and 9 per cent for trade, wholesale and retail. None of the manufacturing SMEs in the sample had a growth rate as high as 16 per cent, however at 10–13 per cent the best performers were close, and manufacturing was the only sector to exhibit double-digit growth across all firm sizes. However, 16 per cent growth does seem to be exceptional given GDP and manufacturing/services growth rates in the Indian economy more generally.

The SMEs operating in services tended to grow their income (10 per cent) at a much faster rate than sales (6 per cent). This trend is not as present in other sectors. Only one of the services SMEs reduced headcount, so income gains cannot be explained by layoffs. When compared with the overall sample, a marginally higher proportion of these enterprises (29 per cent compared with 26 per cent) reported using the loan towards investment and equipment upgrade, which could have increased efficiency and led to growth in income. It is also possible that owners were most cost-conscious given the small growth in sales, or that they managed to source cheaper labour and inputs, or increase prices, hence improving margins.

Assets

The Fourth All India MSME Survey (2013) reported 5 per cent growth in assets in 2005–06, estimating this would reach 7 per cent for the year ending 2012–13. Following the same trajectory as the 2001–13 data, we could expect average growth in assets for MSMEs to be between 8-9 per cent between 2013-17. Overall, the assets grew at 7 per cent annually since the loan, with manufacturing investing the most in assets at a rate of 9 per cent since the loan. Medium-sized manufacturing enterprises significantly outperformed benchmarks, with asset growth of 22 per cent. Wholesale and retail grew its assets in line with the benchmark, reaching 8 per cent. Services grew its assets the least, experiencing 4 per cent annual growth. The lowest recorded asset growth rate from the All India MSME Survey is 5 per cent in 2003-04. This means that the services sector has not only underperformed in sales growth, but it has also invested the least in assets.

Case Study #4. LAP loan for working capital and machinery



Type of Business	Bus stop manufacturer
Time Owned	27 years
Loan Type	LAP
Loan Amount	35 lakhs (US\$56,000)
Year of Loan	2012
No. employees (of At time of loan Current	which female): 100 (0) 82 (0)
No. employees (of At time of loan	which female): 100 (0)

The borrower owns a business manufacturing, installing and maintaining bus stops on local government contracts. In 2012 he took out a 35 lakh loan for working capital and machinery. At that time, he was working on a big contract and had around 100 employees.

Currently he employs 82 workers, with 75 focused on installing and maintaining the bus stops and eight manufacturing bus stops in the warehouse. Depending on the size of the contract, the borrower hires more or less workers. The macroeconomic environment hasn't been too good since taking out the loan, but sales have remained steady and profit margins are around 20–30 per cent. Currently he only banks with RBL.

Productivity

Since the loan, 69 per cent of SMEs have improved sales per worker, 27 per cent of the firms in the sample have decreased it, and 4 per cent stayed constant, growing at an average CAGR of 6 per cent since the loan. While manufacturing was the lowest job creator, growing at a rate of 1 per cent, it has increased productivity the most, on average growing by 48 per cent, followed by wholesale and retail (15 per cent), and services (0 per cent). While the services category had no growth in productivity, it had hired people at the fastest rate before receiving the loan. So this may be a reflection of the cost of training new staff, with the new employees not contributing to increased sales/profits yet. Of the SMEs that improved sales per worker, the average CAGR was 40 per cent, driven by a combination of an average sales increase of 13 per cent since the loan, and average staff reduction of 2 per cent.

Sales per worker as a metric of productivity has its issues, however: first, certain sectors like retail/services will perform badly in comparison with others like manufacturing or software. Also, in the short term, job cuts will increase the metric, but this might not be sustainable if the staff are overworked. In addition, it assumes a linear relationship between employment and sales when the latter is also affected by pricing and market demand.

4.3 Female Ownership and Management

4% of the SMEs had majority female ownership, which is slightly below national averages of 14 per cent in the registered sector and 9 per cent in the unregistered sector. Fourteen per cent of the SMEs had some form of female ownership, including women who were co-signatory or had their name on the business registration. When collecting baseline data, there was concern that using co-signatory and registration information to better understand female economic participation may be overstating their involvement, as wives were often signing as guarantors. However, a greater number of women were reported to be involved in the day-to-day management of SMEs than in ownership (22 per cent compared with 14 per cent), suggesting that this is actually a conservative measure.

Although a small sample, SMEs with some form of female ownership improved productivity to a greater extent than the rest of the SMEs. On average, those with female management also created more jobs, especially for women, and outperformed in sales, income and asset growth. This supports the evidence that gender diversity can enhance business performance.

Figure 5: Sales per worker as at loan

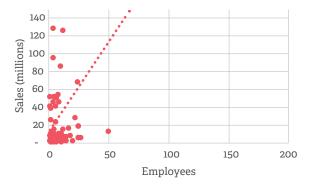


Figure 6: Sales per worker two years after loan

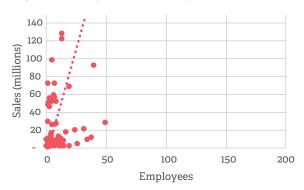


Table 7: Business performance for SMEs with female ownership and management

	Results across all SMEs (CAGR since loan)	SMEs with female ownership (CAGR)	SMEs with women in management positions (CAGR)
Employment	6%	6%	8%
Female Employment	4%	11%	13%
Sales	9%	17%	11%
Income	10%	8%	13%
Assets	7%	13%	9%

5. SME Perspectives

5.1 Impacts of withdrawal of legal tender status for INR 500 and 1,000 notes

The Government of India, via their Notification no. 2,562 dated 8 November 2016, withdrew legal tender status for INR 500 and 1,000 denominations of banknotes issued by the Reserve Bank of India. Overall, the SMEs in this sample felt that the announcement of the policy had an immediate effect on business at the time of announcement. For instance, a medical provider stated that walk-ins decreased: a distributor was unable to sell grain while markets were closed for 12 days; and a hardware retailer suffered as construction was halted. On average, the SMEs in this sample perceived that demonetisation temporarily reduced monthly sales by 22 per cent, income by 24 per cent and stock by 2 per cent, although these results are based on recall and should be treated as estimates. But by the time the survey was conducted in April 2017, the sampled SMEs largely felt that business was back to normal. Based on this check, we are reasonably confident that the results hold true.

5.2 SME financing requirements

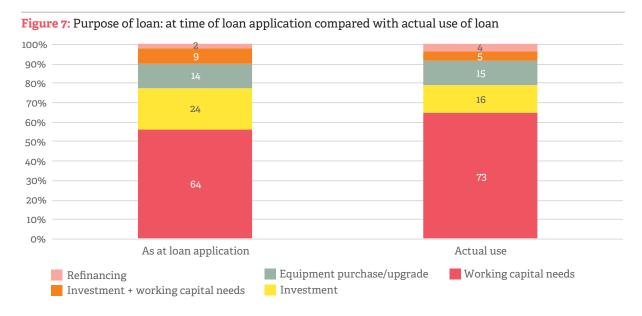
Source

Over half of respondents also replied that access to finance was not a constraint; however, 55 per cent of SMEs were first-time borrowers of formal finance. Over three-quarters (77 per cent) of the SMEs cited personal finances as their main source of

financing before the loan, 63 per cent had used loans from family and friends, and 56 per cent had used moneylenders. This suggests that while informal financing may be available, formal finance is less so, even in guite established cities in India where the survey took place. Formal financing most likely allows SMEs to borrow larger amounts than is possible from family and friends, and at better rates than from moneylenders. It also enables SMEs to build a credit history, which could again improve the rates and amounts of financing, and to access other financial products. So the question of SME access to finance is more nuanced than access or availability; it also requires analysis of when they reach the limit where informal finance no longer serves their needs.

Purpose

Fifty-one per cent of the SMEs used the loan for a different purpose than stated at loan application; around half of those who used the loan for working capital had originally intended to use it for another purpose. Seventy-seven per cent of the SMEs that originally planned to use the loan for a combination of investment and working capital ended up using it for working capital only, perhaps showing a desire to invest in their businesses, but being unable to do so after covering costs. Also, over half of the SMEs used the loan for multiple purposes, rather than for a single purpose as per loan application, showing that SMEs have a wide variety of financing needs.



5.3 RBL Feedback

Thirty-five per cent of SMEs intend to apply for a new loan in the next two years, for an average amount of INR 6.1 million (US\$91,000 – more than double the current average loan size in the sample). Of those intending to apply for a new loan, close to half would take the loan for working capital (46 per cent), followed by investment (22 per cent), and equipment/machinery upgrade (20 per cent). In order of preference, the most important

attributes the SMEs would consider when taking out a new loan would be: interest rate, loan amount available and speed of approval process. Seventy-five per cent of applicants considering a new loan agreed that RBL could contact them to do so. Finally, 79 per cent of the respondents felt that the RBL loan had made a difference to their business performance; this is consistent with the proportion that had grown sales, income and assets.

Case Study #5. Business instalment loan (BIL) to build stock and set up manufacturing unit



	Type of Business	Kitchen utensils manufacturer and trader
	Time Owned	16 years
	Loan Type	BIL
	Loan Amount	30 lakhs (US\$48,000)
	Year of Loan	2014
No. employees (of which female):		which female):
	At time of loan	25 (10–12)
	Current	108 (35)

The borrower and his family own a business manufacturing and trading kitchen utensils. They own two warehouses and rent two additional warehouses, where they receive and pack the utensils before dispatching to retail outlets.

There are four family members working in the business and when they took out a business instalment loan four years ago, they employed 25 people. The loan allowed them to build stock and to set up a manufacturing unit. They now manufacture 90 per cent of their own products, with manufacturing units in Delhi, Malad and Jalgaon employing 48 people. Sales have grown by 18–20 per cent and the number of warehouse labourers has risen from 25 to 60 (35 of whom are women). Retention has been excellent, with no staff members leaving in the past two and a half years.

Demand for their products is strong vis-à-vis competitors as consumers prefer products produced domestically. Also they ensure their products have useful features that distinguish them from other products on the market, such as producing pans that are non-stick.

This was the family's first loan for large-scale expansion. They selected RBL due to the quality of the service and a slightly lower interest rate. They see further opportunities to expand the business, with estimated demand at least 25 per cent higher than filled orders and are keen to establish their own brand. They have recently needed to take out a top-up loan with RBL, as dealing in higher volumes has increased their working capital needs (shops in malls require 90 days' credit).

6. Conclusion

In conclusion, the SMEs showed impressive financial growth, increasing their assets, income and sales at annualised rates of 7–10 per cent since the loan, and generally outperforming or performing in line with market growth. Sixty-nine per cent of SMEs also increased their productivity, growing by an average of 6 per cent since the loan. Seventy-nine per cent felt that the loan had made a difference to their business performance, as they had been able to buy stock at a discount, increase product offerings, and expand stores, among other uses. Over half of the SMEs were firsttime borrowers of formal finance, having previously relied on personal finances, family and friends, and moneylenders to fund their business. These sources of financing are limited either by the small amounts available, or high interest rates. Therefore, we can posit that without access to the loan, the SMEs would not have been able to grow and invest in their businesses to the same extent.

In addition, the study found that there is a significant relationship between SME financing and annual change in employment, with regression analysis indicating that around 10-15 jobs are created per year per million dollars from RBL to SMEs. RBL increased its financing to SMEs by US\$301 million between December 2013-16 to reach US\$841 million,24 which would have created an estimated 5,600-7,200 jobs at the SMEs, and several additional jobs in the SMEs' supply chain and through the spending of wages. The SMEs grew their employment at an average annual rate of 6 per cent; however, most did not change their headcount following the loan, so large job creators are pulling up average growth rates. While it is true that the effects of the best job creators outweigh those that are shrinking, it may be misleading to use average growth rates and multipliers to assess the development performance and health of the SME sector.

Interviews with SME clients of RBL bank revealed their level of satisfaction with and appreciation of the impact that the relationship with RBL had on their businesses. They were able to expand their business, create some additional jobs, maintain the existing jobs, increase sales and consider expansion plans for the future.

The findings of this study reinforce the following:

- Financial intermediaries like RBL, which provide access to finance for SMEs in underserved markets, can be expected to have significant effects on financial inclusion, job creation, reducing the size of the MSME gap and can also positively affect SME financial performance.
- IFC, CDC and their financial intermediary clients (like RBL) should continue to support SMEs and help them grow, as SMEs have the potential to realise impact on employment and, consequently, economic growth.
- There is a need to undertake more research to better understand the effects of access to financial services on financial inclusion, job creation, and clients' financial performance per different types of financial intermediaries, financial products and geographical locations.

As next steps, it is suggested that financial institutions lending to the SME sector in India:

- Undertake similar studies for the rest of RBL's financial inclusion portfolio, even conducting a larger study with a much bigger sample size to compare profitability, and evolutions of SMEs benefiting from different loan products.
- Continue to focus on the women-owned firm segment, on the basis that this study's sample contained very few women-owned firms and demonstrated this is a profitable segment.
- Consider offering a non-financial services product to SMEs that may benefit from it. Some of the select SME clients that the team interviewed expressed interest in improving their business skills through training.

7. Appendices

7.1 Regression output

Variables	(3) emp_annual_ch	(4) emp_annual_ch	(5) emp_annual_ch	(6) emp_annual_ch
Loan_size_USD	10.439*	14.598*	14.092*	14.206*
	[5.823]	[7.533]	[7.910]	[7.882]
Log_sales		0.364**	0.194*	0.192**
		[0.172]	[0.096]	[0.092]
Log_age	-0.419	-0.159	-0.183	-0.180
	[0.324]	[0.402]	[0.437]	[0.441]
Manuf	-0.688	-0.431	-0.830	-0.834
	[0.603]	[0.522]	[0.536]	[0.529]
Retail	-0.811*	-0.710	-0.650	-0.661
	[0.427]	[0.476]	[0.420]	[0.414]
Fem_owned	0.458			0.146
	[0.628]			[0.601]
Sales_annual_gr				
Sales_annual_ch	0.000		0.000	0.000
	[0.000]		[0.000]	[0.000]
Tenor		-0.177**	-0.202**	-0.202**
		[0.086]	[0.090]	[0.091]
First_time			-0.924	-0.901
			[0.648]	[0.664]
Constant	1.583	-2.014	0.675	0.659
	[1.133]	[2.232]	[1.823]	[1.855]
Observations	112	112	112	112
R-squared	0.168	0.225	0.285	0.286
Regression	Annual change	Annual change	Annual change	Annual change
SE cluster	Location	Location	Location	Location

Robust standard errors in brackets *** p<0.01, ** p<0.05, * p<0.1

Case Study #6. MSME loan to expand hardware stock



Type of Business	Hardware shop
Time Owned	5 years
Loan Type	MSME
Loan Amount	5 lakhs (US\$8,000) unsecured 5 lakhs (US\$8,000) secured
Year of Loan	2015 & 2016
No. employees (of which female): At time of loan 1 (0)	
Current	3 (1) full-time equivalents

The borrower owns a hardware shop in Dombivali, an urban centre near Mumbai. He took out a five lakh unsecured loan with RBL a year ago, followed by a second secured five lakh loan 6 months later, to expand his stock and working capital.

Being able to extend credit lines to local builders has meant that he gets much more business, and compared with individuals they place much larger orders, such as 20 buckets instead of a single bucket. His sales have doubled and his profit margins have also increased due to economies of scale (from 10–15 per cent to 20–25 per cent). Five family members now work in the business: the borrower, his wife, older brother full time and two children part time (after school and college respectively). Before taking out the loan the shop provided work for just two family members.

The borrower now has a current account with RBL and chose it based on the ease of application. While business has grown very well, he doesn't require further loans at this time, as the construction market (his main clients) has been a little unstable, which creates some risk when offering credit lines

Case Study #7. MSME loan to expand customer choice



Type of Business	Grocery store
Time Owned	10 years
Loan Type	MSME
Loan Amount	7 lakhs (US\$11,200) secured
Year of Loan	2015
No. employees (of which female): At time of loan 2 (1) Current 5 (1)	

The borrower has owned a grocery store for more than ten years. In response to customer demand, he took out a seven lakh loan a year ago, against his shop.

He used it to purchase a fridge and other equipment (such as containers for pulses) and to increase stock to provide customers with more choice, including chilled soft drinks and other cold storage products.

Monthly sales have since doubled and he has needed to employ three additional helpers (originally, he and his wife had just one helper). After servicing the loan, profit is up around 10–15 per cent. This is the borrower's first ever loan and he is considering applying for another loan next year for a second shop or a home.

Case Study #8. LAP loan to increase stock of high-end sarees



Type of Business	Designer saree shop
Time Owned	16 years
Loan Type	LAP
Loan Amount	1.5 crore (US\$240,000)
Year of Loan	2012
No. employees (of which female): At time of loan 21 (0) Current 29 (0)	

The borrower has run the business with his brother for 16 years. The business is a designer saree shop specialising in wedding sarees and one warehouse, where five 'masters' produce high-end ornate sarees.

The shop provides a wide range of wedding sarees starting at INR 600 (US\$9) up to INR 80,000 (US\$1,200), many of which are sourced from Karnataka in southern India or made in the warehouse.

Four years ago, the brothers took out a 1.5 crore loan with RBL bank to increase their stock. Previously, they banked with a different provider, but moved to RBL because their previous provider was unable to offer an overdraft facility. The borrower now has 18 accounts with RBL, including personal and business current and savings accounts for him and his family.

Taking out the loan enabled the brothers to increase their stock and in particular to invest in high-end products, which has driven a 30 per cent growth in sales and an 8–10 per cent growth in profits. As a consequence, they have needed to recruit six additional workers and two masters, with the overall workforce increasing from 21 to 29, over the life of the loan. The brothers plan to invest their additional profits in new assets and hope to open a second shop in the next two to three years, for which they may require a second loan.

7.3 Benchmarks

Fourth All India MSME Survey

The Fourth All India Census of MSME is the most recent MSME census, and collected data on employment, assets and firm characteristics for MSMEs for the reference year 2006–07, publishing results in 2011–12. The census in this form has since been discontinued, as the Ministry of MSMEs introduced a new online platform to register and understand MSME trends since August 2016.²⁵

India's labour bureau statistics

Annual Employment-Unemployment Survey

For the last four years, India's Labour Bureau has conducted annual employment-unemployment household surveys. While the most recent data is for 2015–16, and therefore older than the quarterly employment surveys, it is drawn from a much larger sample of 100,000 to 150,000 households.²⁶

Quarterly Employment Survey

India's Labour Bureau publishes employment growth rates by sectors quarterly. The expanded sample covers 81 per cent of businesses with more than ten employees, but most Indian businesses are smaller in size, meaning this sample only represents about 1.4 per cent of enterprises in the country, and accounts for 21 per cent of non-farm employment.²⁷ This does not disaggregate by firm size.

Sixth All India Economic Census

The most comprehensive database on employment and firm characteristics in India is the Economic Census conducted by the Central Statistics Office (sixth report published in 2016), which contains data as at 2013. The survey does not collect data on financial indicators, focusing more on firm characteristics such as sector of operation, rural or urban location, proprietorship and female entrepreneurs among others. While this survey provides more recent data for benchmarking compared with the All India MSME Survey, the profile of the enterprises included in the census differs from that of the RBL sample. First, this survey includes businesses of all sizes across India: 96 per cent of the sample had 1-5 workers, 3 per cent had 6-9 workers, and the remaining 1 per cent employed ten or more. This compares with 58, 12 and 29 per cent respectively for the RBL MSME sample. In addition, 22 per cent of the establishments in the census were involved in agricultural activities, and 60 per cent were in rural areas. The RBL SMEs are not directly involved in agricultural activities and are in towns or cities.

Reserve Bank of India

In 2016, the Reserve Bank of India published corporate sector data covering financial performance of non-government non-financial private companies.²⁸ This dataset is compiled from the audited annual accounts of 237,398 private limited companies received from the Ministry of Corporate Affairs, for the periods 2014–15 and 2015–16. This dataset would not contain results from very small companies that are not formally registered or those that do not have audited accounts.

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Notes

- 1. World Bank Group (2012) World Development Report 2012.
- 2. IFC (2017). Enterprise Finance Gap: Reassessment of the systematic shortfall in financing micro, small and medium enterprises. IFC, World Bank Group.
- 3. Crore is a unit of Indian currency equal to 10 million
- 4. Units: sales, income and assets are in nominal terms, and employment numbers in headcount
- 5. The following annual average exchange rates (INR to US\$) have been used for the report: 2010: 47.6; 2011: 45.8; 2012: 48.3; 2013: 54.4; 2014: 60.4; 2015: 61.1; 2016: 65.4; 2017: 67.1.
- 6. This study is based on an internal methodology designed by IFC in 2014 called Expanded Appraisal and Supervision. Similar studies have been conducted with financial institutions across developing economies.
- 7. For the purposes of this study, the term 'jobs supported' means direct jobs in the SME.
- 8. SMEs in India are defined by their total investment in machinery and equipment. Enterprises who take loans of INR 500,000 (US\$8,000) are assumed to have a total investment of at least INR 1m, which is the local definition of an SME. The upper threshold of INR 125 million (US\$2 million), in line with the maximum LAP loan size, excludes large corporates and limits the analysis to SMEs. This is also aligned with IFC's global loan size proxy definition of MSMEs (loans below US\$2 million). BIL and LAP loans originated in FY 2013/14 were selected to coincide with CDC and IFC investment in RBL. The MSME loan business started in FY 2014/15, meaning this was the earliest year the sample for the baseline study could be drawn.
- 9. A very popular **method** is based on the following: **Outliers** are values below Q_1 -1.5(Q_3 - Q_1) or above Q_3 +1.5(Q_3 - Q_1) or equivalently, values below Q_1 -1.5 IQR or above Q_2 +1.5 IQR.
- 10. Since the sample consists of only enterprises that were able to obtain a loan, the results can be interpreted as the correlation between loan amount and job creation conditional on obtaining bank financing. Furthermore, the ordinary least squared estimation is only suggestive of an association between loan amounts and jobs, and does not predict a causal relationship
- 11. The population is defined as all loans originating in the reference year, at or above the minimum size threshold.
- 12. Khanna and Singh (forthcoming). Job Creation by Small and Medium Enterprises from Financing. IFC.
- Brown JD and Earle JS (2013). "Do SBA Loans Create Jobs?" US Census Bureau Center for Economic Studies Paper No. CES-WP-12-27
- 14. These loan proxies were determined using data on loans, sales, employees and assets from 1,978 enterprises. In less than 1.7% of the cases loans between \$10,000 and US\$2 million were made to large enterprises. Khodakivska A (2013) "IFC's Loan Size Proxy: A Reliable Predictor of Underlying Small and Medium Enterprises in the IFC's Financial Markets Portfolio". IFC.
- 15. The notion of a select few high-performing 'gazelles' driving aggregate is referenced in Birch DL, Haggerty A and Parsons W (1995). "Who's Creating Jobs?" Boston, MA.: Cognetics Inc.). Given the distribution of SMEs, this trend of the mean level of key variables being higher than the median continues throughout the analysis.
- 16. World Bank (2014). "The Big Business of Small Enterprises: Evaluation of World Bank Experience with Targeted Support to Small and Medium-Size Enterprises, 2006-12", citing Ayyagari D-K and Maksimovic (2013); Hsieh and Klenow (2012); and Klapper and Richmond (2011).
- 17. Creating a sample of 110. Entries where the number of women employed is greater than the reported total number of employees were assumed to be errors and removed.
- 18. Labour force participation rate, female (% female population aged 15+), ILO, 2014.
- 19. Kapsos et al. (2014). "Why is female labour force participation declining so sharply in India?" ILO.
- 20. Sample removes an error where number of female management staff was greater than the number of employees.
- 21. Table removes an SME from income analysis which is likely an outlier (income CAGR of 2,458%), resulting in a sample of 112.
- 22. McKinsey Global Institute (2017). "India's labour market: a new emphasis on gainful employment". Most recent World Bank Group data has 8% in 2015, but a slowdown to 5% growth in 2012, resulting in an annual average growth rate of 7% from 2012–2015.
- 23. World Bank national accounts data.
- 24. Defined according to IFC loan size proxies, where loans between US\$10,000 and US\$2 million are likely to be funding SMEs, according to research from IFC database matching jobs, assets, sales and loan sizes.
- 25. The Times of India (August 2016). "Finance minister to launch MSME databank, finance facilitation centres", http://timesofindia.indiatimes.com/business/india-business/Finance-minister-to-launch-MSME-databank-finance-facilitation-centres/articleshow/53633264.cms
- 26. McKinsey Global Institute (June 2017) "India's labour market: a new emphasis on gainful employment", p.9.
- 27. McKinsey Global Institute (June 2017) "India's labour market: a new emphasis on gainful employment", p.4.
- 28. The RBI also publishes datasets for the following as part of the corporate sector reporting: FDI companies, listed non-government financial companies, non-government non-banking financial and investment companies, and non-government non-financial public companies. Accessible via: https://dbie.rbi.org.in/DBIE/dbie.rbi?site=statistics









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